

REMARKS

The Official Action dated January 22, 2007 has been carefully reviewed and the foregoing amendment is presented in response thereto. Claims 1 through 12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,381,556 issued to Kazemi et al. in view of U.S. Patent No. 4,509,123 issued to Vereen.

To establish a *prima facie* case of obviousness, at least the following requirements must be met: (1) the references when combined must teach or suggest all elements of the claimed subject matter; (2) there must be some motivation, suggestion or teaching to combine the references; and (3) there must be, within the references, a reasonable expectation of success. *See* M.P.E.P. § 2143 (8th ed., Rev. 2), at 2100-129. The Office has not established a *prima facie* case of obviousness because these requirements have not been satisfied.

The present application describes and claims a system and method that stores product manufacturing parameters within a database, analyzes the stored product manufacturing parameters to define one or more normal parameter subsets, compares manufacturing parameters associated with at least one product with the manufacturing parameters contained within the first normal subset and detects manufacturing parameters associated with the at least one product that are not contained within the normal subset in order to identify manufacturing anomalies. The present application includes two independent claims: claims 1 and 7. The remaining claims in the present application depend from claim 1 or claim 7. Independent method claim 1, as amended, recites:

1. A method for identifying manufacturing anomalies in a manufacturing system comprising a plurality of products which are manufactured with a plurality of manufacturing parameters, the method comprising the steps of storing the plurality of manufacturing parameters in a data warehouse;

applying a data mining program to perform the steps of:
analyzing the stored manufacturing parameters to define a first normal subset, said first normal subset comprising a subset of said plurality of manufacturing parameters of products which show similar performance ratings;
comparing manufacturing parameters associated with at least one product with the manufacturing parameters contained within said first normal subset;
detecting at least one manufacturing parameter associated with said at least one product that is excluded from the first normal subset; and
reporting the at least one detected manufacturing parameter.

Independent apparatus claim 7 recites:

7. A system for identifying manufacturing anomalies in a manufacturing system comprising a plurality of products which are manufactured with a plurality of manufacturing parameters, comprising:
a data warehouse for storing the plurality of manufacturing parameters;
a data mining program applied to the data warehouse for analyzing the stored manufacturing parameters to define a first normal subset, said first normal subset comprising a subset of said plurality of manufacturing parameters of products which show similar performance ratings, comparing manufacturing parameters associated with at least one product with the manufacturing parameters contained within said first normal subset, and detecting at least one manufacturing parameter associated with said at least one product that is excluded from the first normal subset; and
a reporting means for reporting the at least one detected manufacturing parameter.

Kazemi et al. was cited as teaching a system and method to analyze raw data or manufacturing parameters derived from a manufacturing control facility. The reference was further cited as disclosing the use of a data warehouse to store raw data or manufacturing parameters, analysis of these parameters or data through the use of data-mining algorithms, and a data analyzer including a number of different basic applications.

Vereen was cited as teaching a tracking process usable in a manufacturing environment as a means of maintaining inventory data. More specifically, the reference was cited as disclosing the review of data records for identifying items with certain characteristics as ordered by a customer; a process of labeling, detecting, and comparing data assigned to garments as they are grouped and subgrouped; the search and analysis of data records to identify and compare garments; and a process for identifying and excluding a garment or product that does not belong with an order from a box. It was additionally stated that Kazemi teaches the use of data mining programs to analyze, detect and report the various raw datum or manufacturing parameters.

It is believed that the invention as recited in each one of the claims of the present application differs from the system taught in Kazemi et al. and Vereen, taken singularly or in combination. It is not seen that either Kamezi et al. or Vereen teaches or suggests the steps of:

analyzing the stored manufacturing parameters to define a first normal subset, said first normal subset comprising a subset of said plurality of manufacturing parameters of products which show similar performance ratings;

comparing manufacturing parameters associated with at least one product with the manufacturing parameters contained within said first normal subset; and

detecting at least one manufacturing parameter associated with said at least one product that is excluded from the first normal subset.

The office action appears to acknowledge that these steps are not taught or suggested by Kazemi et al. when it states on page 3, lines 1-3 that “Kazemi fails to teach or suggest the first set of parameters containing a subset of parameters that indicate similarities among the manufacturing items and the subset of parameters being compared to the larger set of parameters.”

These steps are also not taught or suggested in Vereen. Vereen does not disclose or suggest a process or system which analyzes stored manufacturing parameters to define a first normal subset, said first normal subset comprising a subset of said plurality of manufacturing parameters of products which show similar performance ratings; compares manufacturing parameters associated with at least one product with the manufacturing parameters contained within said first normal subset; and detects at least one manufacturing parameter associated with said at least one product that is excluded from the first normal subset.

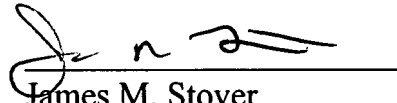
Vereen discloses a system and process for tracking the manufacture and inventory of products, such as garments. The garments are assigned unique serial numbers, and are grouped into boxes for warehousing, and each box is stored in a bin or inventory storage space. Each garment, box, and bin is assigned a unique serial number. This information is saved within a recordkeeping computer used to locate and retrieve products for satisfaction of product orders, and to confirm the contents of product orders prior to shipment to customers. It is not seen that Vereen includes any teaching concerning “a first normal subset comprising a subset of said plurality of manufacturing parameters of products which show similar performance ratings,” or the use of this first normal subset as described and claimed in the present application to identify manufacturing anomalies. The only grouping and subgrouping described in Vereen, is the organization of physical

product, such as garments, into boxes; and the storage of these boxes within a warehouse.

The steps set forth immediately above are included in each one of method claims 1 through 6 of the present application. Similar limitations are contained in each one of apparatus claims 7 through 12. As these limitations are not taught or suggested in Kazemi et al. or Vereen, taken singularly or in combination, it is believed that claims 1 through 12 are patentable over the cited references.

In view of the foregoing amendments and remarks, it is believed that the application, including claims 1 through 12, is in condition for allowance. Early and favorable action is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'J M Stover', is written over a horizontal line.

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